

Creating an appropriate competitive performance by innovation and competitive firm strategy (a study of foods and beverage industry in Makassar)

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ABSTRACT

This study attempts to investigate the effect of innovation, cost strategy and delivery system on the quality and flexibility in achieving high firm's performances in foods and drinks industry. This research was undertaken in Makassar on 120 firms which are represented by staff, managers, directors, owners and HRD, using questionnaires. Types of firms which participated in the survey are individually owned firm, sole proprietary, commanditer and corporation which operate in the several Makassar suburb. The data were collected and analyzed by implementing Structural Equation Modeling. It shows that innovation has affected quality significantly. Cost strategy has also affected quality significantly and also cost strategy has affected flexibility significantly. However, the cost strategy did not affect quality. Beside, quick delivery system did not affect the flexibility. The quality did not affect firm performances whereas the flexibility has affected firm performance significantly.

ABSTRAK

Penelitian ini mencoba untuk mengetahui pengaruh inovasi, strategi biaya dan sistem pengiriman dengan kualitas dan fleksibilitas dalam mencapai kinerja perusahaan yang tinggi dalam makanan dan minuman industri. Penelitian ini dilakukan di Makassar untuk 120 perusahaan yang diwakili oleh staf, manajer, direktur, pemilik dan bagian SDM menggunakan kuesioner. Jenis perusahaan yang berpartisipasi dalam survei adalah perusahaan pribadi, usaha dagang, komanditer dan perseroan yang beroperasi di beberapa pinggiran kota Makassar. Data dikumpulkan dan dianalisis dengan Structural Equation Modelling. Hasil penelitian menunjukkan bahwa inovasi telah mempengaruhi kualitas secara signifikan. Strategi Biaya juga telah mempengaruhi kualitas secara signifikan dan strategi biaya juga berpengaruh terhadap fleksibilitas secara signifikan. Namun, strategi biaya tidak mempengaruhi kualitas. Selain itu, Sistem pengiriman cepat tidak mempengaruhi fleksibilitas. Kualitas tidak mempengaruhi kinerja perusahaan sedangkan fleksibilitas telah mempengaruhi kinerja perusahaan secara signifikan.

1. INTRODUCTION

Business conditions in the 21st Century shows more challenging due to consumers who prefer the high quality product, low cost so that the producer must adapt to the rapid change of such society preferences. Besides that, international trade policy has changed business condition significantly such as American Free Trade Area (AFTA) and ASEAN Community 2015, in which the market will be highly competitive and more foreigners will invest

in other countries to compete with the existing business player.

The new competitors will be better than existing competitors because their managers are well educated, more capable to handle the business, they have more technical expertise, well informed on the way to compete, more experience and they better strategy and use state of the art equipments. Due to the complexity of environment and the obstacle in business, the firm must implement innova-

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tion to compete with national and multinational company (Afuah 2003).

World Economic Forum, 2010-2011 Report shows that Indonesia has rank 44 in the world in terms of competitiveness Index in 2010, while in 2011 Indonesia's position declined to rank 46. Among ASEAN members, Singapore has the best rank of competitiveness index, Malaysia was in the second position (rank 21) and Thailand was in position rank 39. Even though those change could affect by macro economy especially the effect of European crisis, in terms of micro economy approach, this phenomenon shown that the competitiveness of Indonesian firms were declined (Schwab 2010).

The less competitive products made in Indonesia also can be seen in the Indonesian balance of payment for several leading trading partners such as China, Thailand and Singapore which were in deficit that is more import than export. Other obstacles in increasing competitiveness include lacking infrastructure, availability of power supply, logistic management, and efficiency in firm operation. Indonesia could achieve high competitiveness if manufacturing sector well developed which is the leading export of Indonesia (Indonesian Chambers of Commerce 2010).

Manufacturing industries in Makassar is a part of national industry in Indonesia and they also have obstacle to compete with foreign firms in the existing market. In fact manufacturing industry plays important contribution to Makassar economy. The foods and drink industries also contribute significantly to developing economy in Makassar. Among 9 sectors which contribute to Makassar economy, manufacturing sector contributed significantly to Regional Gross Domestic Products (GDP). The manufacturing industries have contributed 23.50 per cent in 2006 became 25.14 percent in 2008. Furthermore, among the important sectors which enhance Makassar economy, the manufacturing sectors became the big four in contributing the economy in Makassar, the others sector including trading, restaurant, hotel and services (Makassar Central Bureau of Statistic Report 2010).

Although, the government tried to create better business environment in Makassar, only a few manufacturing firms were able to joint international especially in foods and drinks, the multinational firms such as Coca cola for drink and Mars for Chocolate lead the international market. Others international firms which produce fish Pillet and cold storage also deal with international trade. For

local firms could become collector for cocoa or other material such as fish and scrap and they resale to manufacturing firms. Others local firms for foods and drinks only relying on local market with lacking competitiveness. Therefore in this research investigates the relationships between innovation strategy, cost strategy, delivery system to enhance competitiveness in order achieve high firm performance.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Innovation

The previous research in competitiveness and firms performances were done by implementing various innovations methods. They were investigated by Avermaete et al. (2003), Baregheh et al. (2012) and Cacciolatti and Fearn (2013). These studies extensively investigated the various effect of innovation on small and medium enterprises in foods and drinks industry different angels of marketing strategy approach, strategic policy. Baregheh et al. (2012) examine SME manager's perceptions to profile their relative commitment to radical or incremental innovation, different type of innovation, and encouraging the development of characteristics of an innovative organization.

Baregheh used the findings in Avermaete et al. (2003) in terms of product innovation, technology and infrastructure, market innovation and organizational innovation which could the basic concept to profile SME manager's perceptions and commitment to innovation. Even though Baregheh et al. (2012) used two ways in collecting data, electronic mail and written questionnaires, they were able to reach 221 usable questionnaires in the analysis. The researcher did not discussed the innovations results whether or not the firms would able to gain competition in the market or even enhancing firm's ability to achieve high performances. However, to explore more detail of innovation, it is necessary to include competitiveness in terms of quality of product and services and flexibility of management team to achieve high firm performances. The more detail relationship between innovation, cost strategy and quick delivery system, competitiveness in quality, competitiveness in flexibility and firm performances, would be investigated in this research. The idea discover those relationships is also taken from Cacciolatti and Fearn (2013), Marcella et al. (2002).

Avermaete et al. (2003) undertook research in two Belgian provinces, Hainaut in the South and West Flinders in the North for 55 respondents of

small food firms. Although innovation is essential, Avermaete found that innovation for small food firms means the firms tended to continuously introduce new products, develop new processes, make changes in organizational structure and explore new markets.

Moreover, some aspects of innovation depend on the age of the company, company size, and regional economic performances. It is interesting findings for Avermaete et al., because in Belgium, province with the better economic performance has the least innovative firms, which means this finding support the view that small food firm may play an important part in innovation activities within lagging regions. This view, would give different insight for Makassar where the region has the better economic performance, innovation activities taken part in to sustain individual character and financial discipline (Alam 2005; Rakhman 2011).

Research in innovation was also taken view in variety angle, made extensive approach was done in various way in measuring how innovations were implemented. Reed et al. (2012) investigates how community control open innovation affects cost and differentiation based competitive advantage and explains how it allows some sources of economic rent to remain while others are taken away. Findings in Reed supported literature knowing that open innovation modifies the sources of monopoly rents when firms use innovations from communities and that are not firm sponsored and not sponsored by a third party. Moreover open innovation modifies the source of monopoly rents for industry incumbents from barriers to entry, while rent for property rights disappear, and those from economic of scale and capital requirements will be reduced, those from experience-curve effects, differentiation, distribution and switching will remain.

Another approach to identify innovation is to give adequate information in product labeling. Dimara and Scuras (2005) investigate type of information in product labeling wondered by Greek wine consumers. The wine consumers rely on the information given in labeling wine to ensure that the wine is the best in quality. They sought information including year of bottling, location of grape production, years of ageing, certification, grape variety, place of bottling, serving instruction, number of produced bottles, and indication of organic cultivation of grape. The level of information sought by wine customers is affected by socio economic factors that segment the market that can be targeted

by firms producing quality food and drink. Characteristics of wine consumers in Greece also important to ensure that customers seeking wine information in radio and TV broadcasted program have a higher level of education, are of an older age, have higher income, come from the rural areas, and seek more information in labels, while all these customers, except from those the rural areas, spend more on wine.

Foods and drink customer in Makassar tended to seek information of the quality of the product and make sure that the foods and drinks are approved by Controller for Medicine and Food Agency certificate. Most of the labeling contain ingredients, expire date and registrar number Health Ministry. None of the product explains the origin of material, but few product explaining serving procedure and storage procedure.

Communication is a side aspect to view innovation, developed by Mahr et al. (2013) who undertaken research in Maastricht, Kids University for Cooking (KU4C). The researcher emphasizes on three fold results. First, the researcher extracted from empirical data distinct factors that stress the central nature of communication for healthy food experiences and confronted them with extant literature. Second, they adopted a value in use perspectives to theoretically validated researcher's view on healthy food experiences and demonstrate how communication influences its value-in use. Third, the researcher established conceptual framework with the project principles, enablers, challenges and outcome of improving the healthy food experience through better communication.

Hypothesis 1: Innovation strategy affects competitiveness for quality of firm significantly.

Hypothesis 2: Innovation strategy affects competitiveness for flexibility of firm significantly.

Cost Strategy

Food and drink industry in Makassar is very competitive market, cost strategy is essential in to ensure the firm would stay in market. Food and drinks' firms tended to offer their product to customers at reasonable price, therefore the firm must work efficiently in order to have competitive price. Efficiency in cost becomes an effective way to achieve high competitiveness. Schwab (2010) emphasizes that in order to gain high competitiveness; the firm must aware market efficiency, employ efficiency, technology efficiency, financial market efficiency, and market size and business sophistication. Although market competition foods and drink industry in Makassar, tends to

become perfect competition, few firms has dominated market due to implementation of cost focus strategy such as noodles producer Indofood Sukses Makmur. Nevertheless, many firms have lacking in market size due to the firms relying on local market which targeted those customers who live in city of Makassar.

Business owners of SMEs foods and drinks in Makassar did not learn from their competitors especially for cost reduction strategy (Munizu 2012). Indeed, it is very important for business owners to learn or even implement information sharing from the competitors, even through association. As Gellynk et al. (2012) investigated to 118 SMEs which produce traditional foods in Hungary, Belgium and Italy. Gellynk undertaken sample used internet to collect data 22 (18.6 per cent) for Hungarian SMEs, 12 (10.2 per cent) for Belgian SMEs and 86 (71.2 per cent) for Italian SMEs. The collected data were analyzed with multivariate analysis. Gellynk findings confirmed that SMEs are weak in brand, and competitor analysis, and their investment in promotion and advertising is rather low and they are more price takers than makers. Those firms that are market oriented tend to distribute mainly through supermarket at the national level, highlighting that the market condition with higher level of competition positively affect the market orientation of the firms.

Hypothesis 3: Cost strategy affects competitiveness in quality of the firm significantly.

Hypothesis 4 : Cost strategy affects competitiveness in flexibility of firm significantly.

Delivery System

Delivery system also plays contribution to marketing success especially for fresh food and drinks. Those firms with quick delivery system will become the leader in food and drinks industry in Makassar. Hitt (2004) explained delivery system could increase ability firm to create value chain.

Moreover, Kaipa et al. (2013) investigates an exploratory case study in Nordic countries, United Kingdom. Three cases of fresh food supply chain, were investigated in their research with unit of analysis a supply chain with three phases producers, wholesaler/logistic provider and retailer. In case 1 the research observes fresh milk, case 2 for fresh fish and case 3 for poultry fresh. Three different needs to be provided to ensure that all products mentioned in cases could have a maximum shelf life and waste reduction. The researcher emphasizes in case 1 is to achieve more stable flow of goods which was observed as more

stable orders and workloads in the upper parts of supply chain. In Case 2, a new operation method was applied similar to case 1, as a result, products reach shop earlier and fresher with a longer remaining shelf life. Three steps cooperation worked well and all parties were actively involved in the change process. It is interesting to find three cases in supply chain in different product and shelf life, especially in the case 3 for fresh poultry with assumption that increasing the shelf life at the retailer will reduce wasting the product. The parties involved in the supply chain are the poultry processor, the wholesaler, logistic company and the retailer.

Kaipa's paper contributed to current knowledge on sustainable supply chain performance by operating information usage for waste reduction and improves shelf availability. Indeed, in the case of fresh food with short self life, waste can be reduced by ensuring that the product reaches the consumer in perfect order with a maximum remaining self life. On the other hand waste reduction is a key factor in increasing the sustainability of supply chain. Therefore due to limited self life in fresh food product, time management is really essential. How quick foods and drinks must be delivered, is the key factors in achieving quality and flexibility of the product. It is important to do research in Makassar to have insights for emerging economy.

Hypothesis 5: Quick delivery affects significantly to competitiveness in flexibility of firm.

Competitiveness

Schwab (2010) found that business sophistication is conducive to higher efficiency in the production of goods and services became compulsory to ensure business competitiveness could be achieved. This leads, in turn, to increased productivity, thus enhancing, a nation's competitiveness. In a broad approach competitiveness can be defined as the set of institutions, policies and factors that determine the level of productivity of a country. In the case of foods and drinks, competitiveness means the ability of human resource management of firm to produce the best quality of foods and drinks. It is very important for those who work in foods and drinks industry to ensure that the customers would be satisfied in terms of the taste and ingredients the product, quality of foods, healthy foods, and uniqueness of the product.

Therefore the role of human resources skill is very important, as described by Habir and Larasati (1999) with three cases for Indonesian companies, it

is no doubt of thought that the manpower development approach need to be seen as competitive advantages for three firms. Cases in their research were given different insights in terms of best practices of human resources management. For Sinar Mas group, internationalization of human resources made the firm able to implement global strategic model with high degree of internationalization of structure, system and people, while Astra Group represents a long term national strategic model, early influenced by Japanese management practices, the founding family deliberately developed at amalgam of management practices, that were fused, over the years, into a distinctive Astra corporate culture. Another firm mentioned in their research is the state enterprise Rekayasa Industry, has given an example of participation and empowerment model. Those three insights have contributed experiences on the way human resources management was developed. The main issue in the research is how the management team involved building the competitiveness in order to let any staff become an important contributor to the firms' performances.

It is generally recognized that core competencies affected level of competitiveness, however, the firms has to prove reputation, stronger network and well qualified staff to create competitiveness. As Rittaisong et al. (2014) found that reputation set of human resources and stronger network effected firm performances. In order to raise conclusion in their research, the qualitative and quantitative approach were implemented. For reputation variable, the sample was asked to describe personal appreciation of a mil and perception about its competency. The indicators include perceived comparative advantage of the firms, the degree of disappointment if the firm were to cease existing, whether respondent regard the firm as likeable, respondent's perception of the firm's status as the top firm, belief that the firm is broadly recognized, and belief that the firm's performs at the premium level. For HRM practices, it indicators include employment insecurity, compensation contingent on firm performances, status distinction, and information sharing. For strong network is the coordination effort and idiosyncratic investment were used to assess the strength of network. Lastly firm performance is used to describe absolute export market share.

Quality

Quality of foods and drinks plays important role to capture the potential market, due to the competi-

tiveness the industry relying on taste, ingredients, healthy, cleanliness, packaging and services. To achieve high quality of foods and drinks it is important to implement total quality management due to let the firms aware all aspects that may improve firms' competitiveness. It generally known that is too many barriers to implement total quality management in emerging country like Indonesia. Amar and Mohd Zain (2002) found that human resources, materials, equipment and attitude toward quality are the main obstacles to implement TQM in Indonesia. However food and drinks industries have a high demand, even income per capita of customer low, demand for food and drinks are still high. The point is whether or not foods and drinks are safe to customer. Yeung et al. (2010) investigates poultry product due to the occurrence of salmonella and the recent H5N1 avian flu. Yeung concludes brand, information and quality assurance as influential risk-reducing strategies to reduce consumer perception of food safety risk and subsequently to facilitate purchase likelihood during a period concern about microbiological contamination in chicken meat.

Moreover, Espejel et al. (2009) also investigates the consumer involvement on quality signal perception, finds that the influence of quality attributes on consumer's perceived risk, trust, satisfaction and loyalty is substantially different between consumer with a high involvement and consumer with low involvement. Consumer involvement multiplies the effect of both intrinsic and extrinsic perceived quality on consumers' loyalty levels. This due to the major level of information requirement which forces consumers to make the best decision regarding the food product of highest quality also leads them to be more loyal.

Different view to measure competitiveness in quality, undertakes by Duffy et al. (2006) in the United Kingdom, saying that the review of communication activities of organization in agro food industry identified an extremely fragmented delivery to consumers and a distinct lack of resources to effectively communicate the information the exists and evaluate its impact on the attitudes, perceptions and behavior of consumers. The consumer research indicated that, while many are interested in food productions issues, the fragmented communication messages that they receive are not giving them a clear reason to consider the implication of their purchases for the British Farming Industry and the environment.

Hypothesis 6: competitiveness in quality affects significantly to firm performances.

Flexibility

Flexibility means how well the firms could adjust the change on customer wishes in terms of taste, ingredient, and quality of product that firms offered to their customers. In previous study found that farmers' involvement in orchard operation in adding the value of foods in Australia is learning example of flexibility of the firm to create unique angle of innovation in foods and drink industry (Alonso and Northcote 2013). Australian experience found that any attempt to promote value adding amongst Australian horticulturalists must have a clear cost benefit rationale, including low cost investment options possibly through cooperatives activities and an available market. Another research done by Mahr et al. (2013) developed a study how service science approach could improve healthy food experiences in the Netherlands. The flexibility of firm to design healthy foods for nutrition reasons need to ensure that customer buying foods based on life style rather than health reason.

Hypothesis 7: Competitiveness on flexibility strategy affects significantly to firm's performances.

Firm Performances

Previous study by Filipetty (2011) investigates the relations and innovation modes and economic performance of firm indicates that much type of innovation modes play important fostering competitiveness and growth, qualified human resources in the field. Design activity requires a highly skilled base of human resources ranging from designers to engineers, scientists to craftsmen. Moreover, study by Mann et al. (1999) found that a minority of food and drinks companies are developing management system along the lines of business excellences (only 18 per cent of food companies are scoring above 300 points against the European Business Excellence Model). The majority of companies are applying traditional methods of management, are not learning from the experiences of best-in practice companies and do not apply a systematic approach to achieving business improvement.

Another approach to investigate firm performance in food and drinks industry is based on employees' productivity and the growth of market share. Jagoda et al. (2013) investigated a bottom-up approach for measurement productivity and improvement found that self improvement, initiative, training, closer inspection, provide better direction are the key methods to improve firm performances.

3. RESEARCH METHOD

This research was undertaken in Makassar with 120 respondents in food and drinks industry. The respondents consist of director of company, manager, head of section in the company, human relation, the owner of company and staff in duty. The samples were taken from Task force supporting Unit at the Trade and Industry Office for Local Government (Makassar City). Directory of this office shown only 104 firms were listed and the remaining 16 firms have not yet registered at the office and the firms were found when this survey was undertaken. The research used 81 male and 39 female participants in the survey and 57 of participants who finished high school and 52 of the participants who finished under graduate degree.

The indicators of Variables were determined from preliminary research to 30 foods and drink firms in Makassar in April 2013 to identify indicators which though by business owner would be best fit to foods and drink industry. Minor change of questionnaire to adjust indicators which needed in this survey, were taken in June 2013 in order to undertake major survey in July to October 2013.

Data were collected by using questionnaires with enumerators visiting firms in Makassar City including the Makassar Industrial Zone (KIMA). The data were collected through all fourteen sub districts in Makassar City and a few cake producers in shopping centre area. All answered questionnaires useful in analysis due to the answered questionnaires were completed by enumerators based on the answer given by the respondents and the enumerators verified the response if the answer not clear or need to be clarified. The collected data were analyzed by structuring equation modeling with Amos 18 to identify variable relations.

4. DATA ANALYSIS AND DISCUSSION

The profiles of 120 respondents were classified based on data presented in the Table 1. Table 2 shows companies' profile based on product produced, type of firms and number of employees. Table 3 shows responses to indicators of the research. Data shown in Table 3 indicates that respondents gave high scores to cost efficiency, new features of product, on time delivery, better handling, intensive innovation and quality consideration. This result has confirmed that foods and drinks producers must concerned on cost strategy and innovation delivery system. This result consists to result on Kaipa et al. (2013) which contributes to management knowledge that it is important to ensure that self life of product long and therefore

Table 1
Respondents Profile

No.	Respondent characteristics	N	Percent (%)
1	Sex :		
	Men	81	67.50
	Women	39	32.50
2	Age (in years):		
	10 - 25	26	21.67
	26 - 40	19	15.83
	41 - 55	49	40.83
	55 - 70	26	21.67
3	Educational background :		
	High School or same level	57	47.51
	Diploma	5	4.16
	Under Graduate	52	43.33
	Post Graduate	6	5.00
4	Respondent's position:		
	Leader	61	50.83
	Supervisor	13	10.83
	Manager	18	15.00
	Owner	4	3.33
	Director and Assistant Director	6	5.00
	Others	18	15.00
5	Work experience (in years) :		
	1 - 3	26	40.9
	4 - 7	38	21.6
	8 - 10	31	14.7
	> 10	25	12.8
	Total	120	100

Source: Primary Data 2013.

quick delivery is essential. This results also consist of finding in Avarmaete et al. (2003) in Belgium that innovation could the firm introduce of new product, new process and change in organizational structure and explore new market. A little different angle innovation of foods and drinks in Makassar, confirmed that the firm need to intensive innovation, making new feature of product, enhancing production process, innovation must be consistent and having standard of procedure and based on customer wishes. Innovation of foods and drinks must consider the character of dwellers in Makassar with several types of life styles, a variety income level and different perceived customers. This result contradicts of finding in (Munizu 2012) which explained that SMEs foods and drinks in Makassar did not learn from their competitors in applying cost reduction strategy.

Furthermore results in Table 3 reveals respondents opinion that several indicators in quality and flexibility were given rating slightly lower than rating given to innovation and cost strategy. This may affects rating given to firm performances, which indicates that the majority of foods and drinks in Makassar were in moderate level performances.

Variable Relation

Figure 1 show relations of variable in this research. In interpreting the model, this research considers the value coefficient of the direct effect, an indirect effect and the total effect. The result of calculation are of the of innovation strategy, cost strategy, delivery system, quality, flexibility and firm performance. All this can be seen in Table 4.

Innovation Strategy to Quality

Innovation strategy affects significantly to Quality with regression weight of 1.135, which means that innovation strategy affects significantly to competitiveness in quality in order to achieve high firm performances. Type of innovation implemented were design, taste, change of process based on what customer wish, and having standard procedure in innovation. A few firm in this research produce chocolate for foreign market, need to aware international quality based on country targeted. Firms in fish industry and foods and drink processors such as passion fruit, originally drinks from locally fruits, cashew nut applied innovation in enhance production processed. It is important to note that customers of foods and drinks relying on label of products in order to ensure that products made by

Table 2
Companies' Profile

No	Companies' Profile	N	Percent (%)
1	Product Produced:		
	Bread	21	17.5
	Cake	10	8.33
	Foods	14	11.67
	Soft Drink and Juice	19	15.83
	Drinking Water	9	7.50
	Fish and Processed Fish	8	6.67
	Soybean (Tahu tempe)	2	1.67
	Meat Ball and Meat processed	4	3.33
	Coffee and Chocolate Processed	10	8.33
	Chips, biscuit and bean	9	7.50
	Spicy	5	4.17
	Others	9	7.50
2	Type of firm:		
	PO (Personally owned)	48	40.00
	UD (Sole Proprietorship)	15	12.50
	CV (Commanditer Firm)	14	11.67
	PT (Limited Corporation)	43	35.83
3.	Number of workers:		
	1 - 20	93	77.50
	21 - 40	12	10.00
	41 - 60	4	3.33
	61 - 80	1	0.83
	81 - 100	1	0.83
	101 or more	8	6.67
	Total	120	100

Source : Respondents 2013.

well qualified producers.

Finding in this research consists with results found in Baregheh et al. (2012) who also referred research done by Avarmaete et al. (2004) that the profile of innovation in food SMEs within the UK tended to be variously on incremental, radical, product or/and process innovation and in addition considers engagement with a range of innovation orientation activities. Nevertheless, the result shown in Baregheh tended to emphasize that the SMEs have a relatively low level of engagement in partnering and strategic alliances, whereas food SMEs demonstrated a high level of engagement with monitoring their market place and other marketing activities. This phenomenon also found in Makassar, that marketing activities and market monitoring were very important to firm in order to ensure perceived customer and intensive innovation must exist. Baregheh recommends the next research could be emphasized on innovation orientation or innovativeness scale to support business in understanding and management of processes and cultures to support innovation success. Therefore research in Makassar contributes to the theory on management of process.

In conjunction with last economic shock in In-

donesia 1997, foods and drinks industries were could sustain and stable during the crisis. The owners of businesses believe that because of less of imported raw materials making the industry could be protected by the crisis, which could the industry competitiveness. This industry is could be accessed easily by new comers, made the existing entrepreneurs protect themselves by undertaking innovation. This research believes that innovation is important to ensure competitiveness being achieved. This research supported Schwab (2010) who reported innovation as twelfth pillars in country competitiveness report. A few firms in foods and drinks industry in Makassar are multinational firms with advanced type in innovation made them able to capture international market through marketing network internationally. These firms contribute to country competitive index making Indonesia far away from others ASEAN nations.

Cost Strategy to Flexibility

Result indicates that cost strategy affects significantly to flexibility with regression weight of 0.804 which means variable of cost strategy affects significantly to competitiveness in flexibility in order to achieve better firm performances. Therefore cost

Table 3
Responses to Indicators of Foods and Drinks Survey

No	Construct	Indicators	Mean	SD
1	Innovation Strategy	X1.1 Intensive Innovation	4.49	0.53
		X1.2 New Features of product	4.50	0.57
		X1.3 Enhance process	4.47	0.56
		X1.4 Consistent Innovation	4.32	0.56
		X1.5 Customer Wish Innovation	4.25	0.59
		X1.6 Standard procedure innovation	4.37	0.64
2	Cost Strategy	X2.1 Cost efficiency	4.55	0.65
		X2.2 Less Price	4.25	0.63
		X2.3 Cost consideration	4.34	0.70
3	Delivery System	X3.1 Quick delivery	4.42	0.65
		X3.2 On time delivery	4.50	0.62
		X3.3 Better handling	4.50	0.60
4	Quality	Y1.1 Best quality design	4.35	0.61
		Y1.2 Long period used	4.36	0.62
		Y1.3 Quality consideration	4.42	0.34
5	Flexibility	Y2.1 Quick change design	4.35	0.64
		Y2.2 Well diversified product	4.37	0.60
		Y2.3 Adaptive demand	4.35	0.66
6	Firm Performance	Y3.1 Growth market in three years	4.20	0.58
		Y3.2 Growth sales in three years	4.24	0.62
		Y3.3 Return on investment in 3 years	4.18	0.63
		Y3.4 Employee's productivity in 3 years	4.23	0.67

Source : Developed for this research.

strategy could support competitiveness in flexibility to achieve high firm performances. Foods and drinks firm must consider cost efficiency in production process, do not sell higher than their competitors, at the same time be aware of cost in producing goods to be competitively. A few firms produce soybean need to be aware of raw material with high price, would make firm become less competitive. Juice producers also need to change the volume in each box due to achieve efficiency.

Result in this research consists of finding in Kemp et al. (2007) saying that cost strategy affects firms flexibility to provide foods based on customer needs in nutrition. Foods and drinks industry in Makassar offers foods and drinks by considering customer wishes. All foods and drinks must be approved by Medicine and Foods Controller Agency, an agency which observes quality food, drinks and medicine industry. Firms must be aware of customer demand to prevent over stock for meat, soybean curd, cake, bread, and meatball.

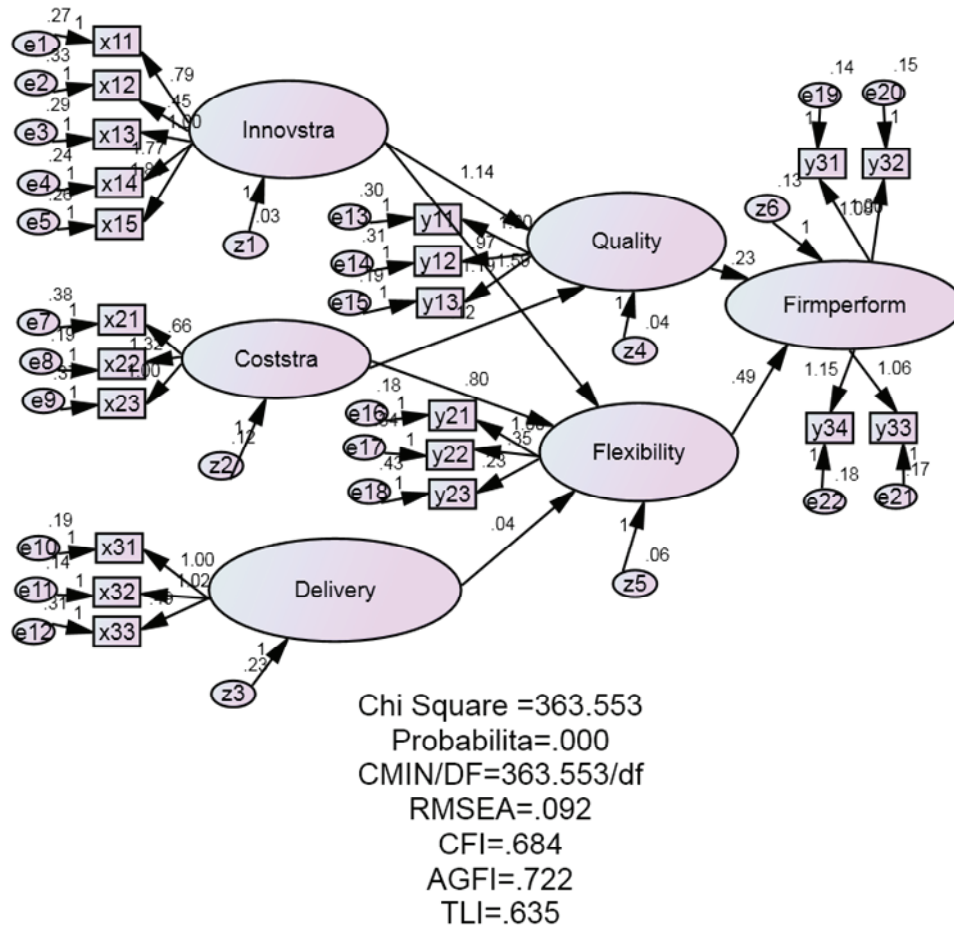
Those multinational firms provide chocolate, fish processed for international market; have sales contract with best quality standard must offer product which based on international quality by holding ISO certificate. The firms need flexible in making standard for international customer. These firms are able to enhance production facility and achieve high flexibility to gain better competitiveness.

Cost Strategy to Quality

Table 4 also presents the result of the relations between cost strategy to competitiveness in quality, which shows that regression weight of 0.124 and probability of $0.312 > 0.05$ means that cost strategy did not affect competitiveness in quality. In other words, foods and drinks firms in Makassar did not able to achieve better quality by implementing efficiency. Most of firms have in the efficient conditions, therefore more reducing in cost will not be able for the firm to achieve better quality product in increasing firm performances. In fact reducing cost would make the product quality lower than accepted. For example chocolate, meat processed, coffee and biscuits are needed in standard quality, if these products become lower in quality, there will be problems to sell the product due to lacking in quality.

The majority of foods and drinks firms in Makassar considering efficiency as the key points, therefore most of firms are operating in an efficient way. Nevertheless efficiency was not a helpful way to increase the quality of product. Most of the sample in this survey are small firms, their capability to achieve economic scale are lacking, even though firms implement cost strategy, they will not be able to achieve better quality in order to increase firm performances. Lacking in quality will make firm be less competitive and efficiency is a pillar of competitiveness.

Figure 1
Relations of Variables



Source : Developed for this research..

The result in this survey contradict to concept developed in Schwab (2010) that efficiency in several aspects such as market efficiency, labor efficiency, technology efficiency, financial market efficiency and market volume become the key roles in creating competitiveness. It is long way to go for foods and drinks industry would achieve high rank competitive index for Indonesia.

Innovation Strategy to Flexibility

Result indicates that innovation strategy affects significantly to flexibility with regression weight of 1.585 and probability $0.036 < 0.05$. This result means innovation strategy affects significantly to competitiveness in flexibility in order to achieve high firm performances. The result emphasizes that foods and drinks firms in Makassar have developed new feature of foods and drinks by considering well diversified product. Innovation strategy is also being used to response change in customer preference by change foods taste and drinks design in ingredients and packaging.

This result consists of result found in Aver-

maete et al. (2003) in Belgium, which the food sector in fact forced continuously to make change in production process in order to fulfill rising safety and quality regulations, and at the same time, small food firms regularly implement innovations that are not compulsory. In the case Makassar, the authority requests small foods firms to fulfil standard requirement. In this case, only soybean curd producers being told to be consistent in maintain best quality. This result also consists findings by Mananeke (2009) in South Sulawesi Coastal business owners, that learning organization, organizational culture, innovation and intellectual capital affect competitiveness and organizational performance.

However, this result contrast to result found in Baldwin and Hippel (2010) in the USA that the collaborative innovation tended to be raft and became an expensive exercise, rigidly implemented due to this innovation need long research and development process. Collaborative innovations also bear high risk because collaborative partners would become competitors at the same market.

Table 4
Relations of Variables

Dependent	Independent	Estimate	SE	CR	P
Quality ←	Innovstra	1.135	0.600	1.891	0.059
Flexibility ←	Delivery	0.044	0.111	0.399	0.690
Flexibility ←	Coststra	0.804	0.245	3.281	0.001
Quality ←	Coststra	0.124	0.122	1.011	0.312
Flexibility ←	Innovstra	1.585	0.757	2.093	0.036
Firmperform ←	Quality	0.235	0.286	0.820	0.412
Firmperform ←	Flexibility	0.487	0.187	2.596	0.009

Source: Developed for this research.

Delivery System to Flexibility

Table 4 shows that quick delivery did significantly affect competitiveness in flexibility as the probability of $0.690 > 0.05$ with the regression weight of 0.044. The result emphasizes that foods and drinks industry in Makassar reveal that quick delivery did not affect significantly to competitiveness in flexibility. This result contrasts to value chain strategy theory by Hitt et al. (2004) quick delivery would make producers could service the customers in flexible way. It is hoped that quick delivery system would affect firm flexibility to service the customers, in fact this survey, reveals that the majority of food and drinks firms in Makassar do not need to deliver their own product, due to other firms could deliver product to market in distance area out of Makassar city. Those firms which must deliver their own product did not concern about quick transportation because majority of customers living in the city of Makassar. Only few small food firms facing transportation problem due to lacking in transportation facilities.

Furthermore, this survey found similarly result in Amar dan Mohd Zain (2002) who investigated the industry in Indonesia, saying those manufacturing firms never ask its suppliers to involve in management development to achieve good total quality management including marketing activities. This survey found that several foods producers in Makassar relying on the public transport to distribute the product. As a result several firms did comfortable or flexible to arrange transportation time, the main road in Makassar tended to have the traffic jam. The consequence of this a few foods and drinks become too late to get in to the traditional market.

Competitiveness in Quality to Firm Performance

Table 4 reveals that relationship between competitiveness in quality to firm performance having regression weight of 0.235 with probability of $0.412 > 0.05$. This result indicates that competitiveness in quality does not affect firm performance. In other

words achieving competitiveness in quality will not helpful to increase firm performance. Most of firms that participated in the survey are small foods and drinks firms with the number of workers less than 5 workers, it is reasonable to say that majority firm could not have market share growth, high return and investment, high labor productivity, even these firms keen to increase productivity. Several firms such as bread producers, drinkable water producers and cake producers do not reach economic of scale, although they concern in quality but firms performances still below than expected. Almost half of sample having working experience three years and less is reasonable to say that they are lacking in experience.

This result contradicts to result found in Cacciolatti and Fearne (2013) saying that the more information SMEs use, and the better quality of information available, the better the decision making taking place in firms should be. In fact, foods and drinks industry in Makassar majority are small firms with low productivity, facing highly competitive market.

Result in Makassar also contradicts to result found in Hudayah (2011) in East Kalimantan, that concludes business performance could be affected by internal service quality, external service quality, working satisfaction and customer satisfaction at local bank in East Kalimantan. In frankly speaking, the foods and drinks business owners believe that competitiveness in quality is the key point for Makassar case, Most of business owners aware of quality is important and it must be maintain to ensure that universal approach by Schwab (2010) emphasis that quality is a pillar country competitiveness. Unfortunately in Makassar case quality could not fulfill in having high firm performance.

Competitiveness in flexibility to Firm Performance

Table 4 also shows the relationship between competitiveness in flexibility to firm performance,

which indicates regression weight of 0.487 with probability of $0.009 < 0.05$. This result means competitiveness in flexibility affects significantly to firm performance for foods and drinks industry in Makassar. In order to achieve high firm performances, it is necessary for business owners to consider quick change design, well diversified product and must aware of customer demand.

Several firms produce noodle, cake and biscuit and bread are facing quick change in customer preferences, relying on receive to keep customer loyalty. Whereas processed meat producers, chocolate producers and lobster processed keeping customer loyalty using international procedure.

Result found in this research consist to result found in Han et al. (2007) that firm performance is measured by firm growth, market share and return on investment, these aspects would be affected by competitive and innovation strategy. Foods and drinks firms have high competitiveness in flexibility making firms would able to capture the right number when there are changing demand in Makassar. Food and drinks firms could be efficient in order to achieve high return on investment, high labor productivity. This result also consists to result found in Alam (2005) than informal sector performance could be affected by financial aspect, marketing, human resources and entrepreneur including innovation. Majority sample in this survey could be classified into micro businesses but they were able to implement a variety type innovation due to stay well in high competitive market. Most of these firms only relying in local market; however their performances were still reasonable.

5. CONCLUSION, IMPLICATION, SUGGESTION AND LIMITATIONS

The finding of this research indicates that innovation strategy affected significantly to competitiveness in quality and competitiveness in flexibility, while cost strategy affected significantly only to competitiveness in flexibility but it did not affect to competitiveness in quality. Quick delivery system does not affect to competitiveness in flexibility. In terms of intervening variables, competitiveness in flexibility affected significantly to firm performance, whereas competitiveness in quality did not affect to firm performance. Foods and drinks industry in Makassar have committed to implement innovation strategy by undertaking priority for intensive innovation, consistent innovation, innovation customer wish, enhance process and standard procedure innovation. Furthermore, respondents im-

plement cost strategy by less price, efficiency and cost consideration, could affect competitiveness in flexibility but it did not affect competitiveness in quality. Moreover, quick delivery, on time delivery and better handling system did not affect competitiveness in flexibility. In terms of firm performance, foods and drinks firms, could be affected by quick change design, well diversified product and adaptive demand whereas best quality design, long period use and quality consideration did affect to firm performance.

Implication of the research to existing theory, that in SMEs, the quality of product did able to become centre of consideration to increase firm performance, as consequence of sample in this survey are classified not achieving appropriate economic of scale. A few firms is too small to be in high competitive market. However results the survey contributes new insight in food and drink industry research. Weaknesses of this research might be address in the wide range of number of employee and a variety product were observed in this survey, this make difficult to generalize innovation strategy and cost strategy and quick delivery system variables. Several respondents are also answering questionnaires as self confidence feeling.

REFERENCES

- Afuah, A 2003, *Innovation Management : Strategies Implementation, and Profits*, 2nd edition, Oxford University Press Inc: New York.
- Alam, S 2005, 'Factors affecting informal sectors' performances in South Sulawesi', *Doctoral dissertation*, Post Graduate Program Hasanuddin University, Makassar.
- Alonso, AD and Northcote, J 2013, 'Investigating farmer's involvement in value-added activities a preliminary study from Australia', *British Food Journal*, vol. 115 no. 10, pp. 1407-1427.
- Amar, K and Mohd, ZZ 2002, 'Barrier to implementing TQM in Indonesian manufacturing organization', *The TQM Magazine*, Vol. 14, no. 5, pp. 367-372.
- Avermaete, T, Vianne, J, Morgan, EJ and Crawford, N 2003, 'Determinants of innovation in small food firms', *European Journal of Innovation Management*, vol. 6, no. 1, pp. 8-17.
- Balwin, C, and Hippel, EV 2010, 'Modeling a paradigm shift: from producer innovation to user and open collaborative innovation', *Working Paper*, MIT Sloan School of Management and Harvard Business School Finance.
- Baregheh, A, Roely, J, Sambrok, S, Davies D 2012, 'Innovation in food sector SMEs', *Journal of*

- Small Business and Enterprise Development*, vol. 19, no. 2, pp. 300-321.
- Cacciolatti, LA and Fearne, A 2013, 'Marketing intelligence in SMEs: implication for the industry and policy makers', *Marketing Intelligence and Planning*, vol. 31, no. 1, pp. 4 – 26.
- Dimara, E and Skuras D 2005, 'Consumer demand for informative labeling of quality food and drink product: a European Union case study', *Journal of Consumer Marketing*, vol. 22, no. 2, pp. 90-100.
- Duffy, R, Fearne, A and Healing, V 2006, 'Reconnection in the UK food chain, bridging the communication gap between producers and consumers', *British Food Journal*, vol. 107, no. 1, pp. 17-33.
- Espejel, J, Fandos, C and Flavian, C 2009, 'The influence of consumer involvement of quality signals perception an empirical investigation in food sector', *British Food Journal*, vol. 111, no. 11, pp. 1212-1236.
- Filipetti, A 2011, 'Innovation modes and design as a source of innovation: a firm level analysis', *European Journal of Innovation and Management*, vol. 14, no. 1, pp. 5 – 26.
- Gellynk, X, Banterle, A, Kuhne, B 2012, 'Market orientation and marketing management of traditional food producers in the UE', *British Food Journal*, vol. 114, no. 4, pp. 481-499.
- Habir, AD, and Larasati, AB 1999, 'Human resources management as competitive advantage in the new millennium an Indonesian perspective', *International Journal of Manpower*, vol. 20, no. 8, pp. 548-562.
- Han, SB, Chen, SK, Maling E 2007, 'The Impact of ISO 9000 on TQM and business performance', *Journal of Business and Economic Studies*, vol. 13, no. 2, pp. 222-232.
- Hudayah, S 2011, 'Effect of internal service quality to work satisfaction, external service quality, bank customers satisfaction and business performances at East Kalimantan Development Bank', *Doctoral dissertation*, Hasanuddin University Makassar.
- Hitt, M, Ireland, RD & Hoskisson, RE 2004, *Strategic Management Competitiveness and Globalization: Concept and Cases*, Sixth edition, South-Western.
- Indonesian Chambers of Commerce Report, 2010.
- Jagoda, K, Lonseth, R, and Lonseth, A 2013, 'A Bottom-up approach for productivity measurement and improvement', *International Journal of Productivity and Performance Management*, vol. 62, no. 4, pp. 387-406.
- Kaipa, R, Popovska, ID, and Loikkanen, L 2013 'Creating sustainable fresh food supply chains thorough waste reduction', *International Journal of Physical Distribution and Logistics Management*, vol. 43, no. 3, pp. 262-276.
- Kemp, E, Burton S, Creyer, EH and Suter TA 2007 'When do nutrient content and nutrient content claims matter? assessing consumer trade-offs between carbohydrate and fat', *The Journal of Consumers Affairs*, vol. 41, no. 1, pp. 47-73.
- Lakhal L 2009, 'Impact of quality on competitive advantage and organizational performance', *Journal of the Operational Research Society*, vol. 60, no. 1, pp. 637-645.
- Mahr, D, Kalogeras, N and Schroder, GO 2013, 'A service science approach for improving healthy food experiences', *Journal of Service Management*, vol. 24, no. 4, pp. 435-471.
- Makassar Central Bureau of Statistic Report, 2010.
- Mananeke, L 2009, 'Factors affecting competitiveness and organizational performances at coastal community businesses in North Minahasa sub District', *Doctoral dissertation*, Post Graduate Program Hasanuddin University Makassar.
- Mann, R, Adebajo, O, and Kehoe, D 1999, 'An assessment of management systems and business performance in the UK food and drinks industry', *British Food Journal* vol. 101, no. 1, pp. 5 -21.
- Marcella, R, Davies, S and Williams, D 2002, 'The language strategies of Scottish exporters in the food and drink sector' *Journal of Small Business and Enterprise Development*, vol. 9, no. 4 pp. 358 – 369.
- Munizu, M 2012. ' Effect of application total quality management to quality culture, competitiveness and firm performances (a study of manufacturing industry in Makassar)', *Doctoral dissertation*, Post Graduate Program Brawijaya University Malang.
- Rakhman, A 2011 'Financial discipline: A survey of entrepreneurs' perspective in South Sulawesi' *Journal of Economics, Business and Accountancy Ventura*, vol. 14, no. 2 pp. 119-132.
- Reed, R, Barnes, SS, Jessup, L 2012, 'How open innovation affects the drivers of competitive advantage, trading the benefits of IP creation and ownership for free invention' *Management Decision*, vol. 50, no. 1, pp. 58-73.
- Ritthaisong, Y, Johri, LM, and Speece M 2014, 'Sources of sustainable competitive advantage: the case of rice-milling firms in Thailand', *British Food Journal*, vol. 116 no. 2, pp. 272-291.

Schwab, K 2010, The Global Competitiveness Report 2010 – 2011, *World Economic Forum*, Geneva Switzerland.
Yeung, R, Yee, W, and Morris, J 2010, 'The effects of

risk-reducing strategies on consumer perceived risk and on purchase likelihood a modelling approach', *British Food Journal*, vol. 112, no. 3, pp. 308-322.